

**AMENDMENTS TO THE SPECIFICATION:**

Please replace paragraph [0014] with the following amended paragraph:

In another aspect, the invention relates to method of operating an aluminum oxide moisture sensor to measure moisture in a sample gas, where the sensor comprises a pair of electrodes sandwiched about a dielectric, and the method comprising: a) heating the sensor to a first temperature above the sample gas temperature and holding the sensor at said first temperature for a first predetermined period of time; b) cooling down the sensor to a second lower temperature over a second predetermined period of time; c) taking plural samples of sensor conductance over a third predetermined period of time at the second lower temperature; and d) determining a rate of adsorption of the moisture and using the rate of adsorption as a measure of moisture in the sample gas; wherein step c) is carried out by taking about 100 samples of sensor conductance, and wherein the third predetermined period of time is about 60 and 90 seconds; and wherein step d) is carried out in part by applying a 10-point moving average filter to the plural samples of sensor conductance to obtain data filtered for noise reduction; and by performing a linear ~~repression~~ regression on the data filtered for noise reduction to obtain a slope representative of the rate of adsorption.